

## **REMARKS**

Claims 1-41 are pending. Applicant proposes amending claims 1, 8-10, 13, 20-23, 24-26, and 31-34, and canceling claims 6-7, 18-19, and 29-30.

Claims 1 through 41 stand rejected under 35 U.S.C. § 103. Claims 25 and 38-41 stand rejected under 35 U.S.C. §§ 101.

Reconsideration is respectfully requested in view of the above amendments and following remarks.

### ***Telephone Interview***

The undersigned wishes to thank Examiner Kumar for granting the telephonic interview of December 11, 2008.

During the interview, the undersigned proposed an amendment to claim 1 consistent with the amendment proposed herein. The undersigned also explained various distinctions between the claim language and the cited references. The remarks submitted herein are consistent with the discussion during the interview.

Examiner Kumar indicated that the proposed amendments and arguments might address the pending prior art rejection, but reserved a decision on that issue until submission of a written response.

### ***Rejection Under 35 U.S.C. § 103(a)***

Claims 1-41 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over US patent publication 2003/0076306 A1 (hereinafter “Zadesky”) in view of US patent publication 2001/0043198 A1 (hereinafter “Ludtke”). Reconsideration is respectfully requested.

Amended claim 1 recites:

A user interface control, comprising:  
a touchpad control having a touch-sensitive surface comprising the shape of an arc, **the arc divided into a first region and a second region by a dividing boundary**, the first region associated with a first function having a plurality of different degrees of said first function, each degree of the first function associated with a corresponding relative distance

within the first region from the dividing boundary, and the second region associated with a second function having a plurality of different degrees of said second function, each degree of the second function associated with a corresponding relative distance within the second region from the dividing boundary, **the second function being an opposite function of the first function,**

wherein the touchpad control is configured to detect a touch within the first region or the second region, and **to select the first function and an associated degree of the first function corresponding to the relative distance of the touch from the dividing boundary** upon detecting the touch in the first region, and **to select the second function and an associated degree of the second function corresponding to the relative distance of the touch from the dividing boundary** upon detecting the touch is in the second region.

In order for a reference or set of references to render the claim obvious, the references must teach the entirety of the recited claim including the above-emphasized language. Applicants respectfully submit that the cited references do not teach the emphasized language and cannot possibly teach the recited combination.

Zadesky discloses a media player having a touch pad 110. In connection with FIGS. 2, 3a, 3b, and 3c, Zadesky discloses that the touch pad 110 is arranged to receive input from a finger moving across the surface of the touch pad 110. (Zadesky at ¶ [0036]). The types of finger motions that are effective inputs to the touch pad 110 include finger motion, rotary or swirling finger motion, or finger tapping. (Zadesky at ¶ [0037]). In one embodiment, the control function corresponds to a scrolling feature for scrolling through a song menu displayed on a display screen 104. (Zadesky at ¶ [0038]). The touch pad may be arranged to move the GUI vertically up when the finger is moved in a first direction and vertically down when the finger is moved in a second direction. (Zadesky at ¶ [0039]).

In contrast with claim 1, Zadesky does not disclose “a touch-sensitive surface comprising the shape of an arc, **the arc divided into a first region and a second region by a dividing boundary.**” Rather, Zadesky discloses a single touch pad input area that distinguishes between inputs, not based on region, but based on the direction of the user’s finger inputs. In Zadesky, any movement of the finger **originating from any position on the single touch pad area** in the direction towards the upper edge of the touch pad will scroll the

menu of songs in the up direction, and conversely, any movement of the finger **originating from any position on the touch pad area** in the direction towards the lower edge of the touch pad will scroll the menu of songs in the down direction. The touch pad 110 has a single input area and may be touched at **any** point in the touch pad surface. Thus, in Zadesky, there is no concept of a touch sensitive surface “**divided into a first region and a second region by a dividing boundary.**”

Furthermore, Zadesky also does not teach or suggest “the **first region associated with a first function . . . and the second region associated with a second function . . . the second function being an opposite function of the first function.**” In Zadesky, the menu on the display may be scrolled up and down by touching any point on the touch pad surface and then moving the finger up or down along the touch pad surface to indicate the direction of scrolling. Thus, Zadesky’s touch pad 110 provides functionality for scrolling up or down. But neither the up nor the down functionality is “associated with” a particular “region” of the touch pad surface. Rather, in Zadesky, the scrolling functionality is associated with the direction of the finger movement and not the region of the touch pad. Moreover, because Zadesky does not disclose “a first region associated with a first function” and a “second region associated with a second function,” Zadesky cannot possibly disclose that the “**the second function [is] an opposite function of the first function.**”

Zadesky also does not disclose:

the first region associated with a first function having a plurality of different degrees of said first function, **each degree of the first function associated with a corresponding relative distance within the first region from the dividing boundary,** and the second region associated with a second function having a plurality of different degrees of said second function, **each degree of the second function associated with a corresponding relative distance within the second region from the dividing boundary,**

wherein the touchpad control is configured . . . to select the first function and **an associated degree of the first function corresponding to the relative distance of the touch from the dividing boundary** upon detecting the touch in the first region and **an associated degree of the second function corresponding to the relative distance of the touch from the dividing boundary** upon detecting the touch in the second region.

Zadesky utilizes the speed of movement of the finger across the touch pad to determine the degree of functionality. More particularly, Zadesky describes the selection of degree of functionality as follows:

To elaborate, the display screen 104, during operation, may display a list of media items (e.g., songs). A user of the media player 100 is able to linearly scroll through the list of media items by moving his or her finger across the touch pad 110. As the finger moves around the touch pad 110, the displayed items from the list of media items are varied such that the user is able to effectively scroll through the list of media items. However, since the list of media items can be rather lengthy, the invention provides the ability for the user to rapidly traverse (or scroll) through the list of media items. **In effect, the user is able to accelerate their traversal of the list of media items by moving his or her finger at greater speeds.** (Zadesky, paragraph [0040]).

Thus, in Zadesky, the degree of functionality is determined from the speed of movement of the touch and **not “the relative distance of the touch from the dividing boundary”** as recited in claim 1.

Ludtke does not address the deficiencies of Zadesky. Ludtke discloses a data entry user interface comprising a touch sensitive display screen 11 with a slider 14. (Ludtke at ¶ [0015], [0016]). The slider 14 provides indexing marks or other graphical information to indicate to the user what type of data will be entered as the slider is manipulated. (Ludtke at ¶ [0030]). The contents of the slider data is tailored to the nature of the field being manipulated. (Ludtke at ¶ [0030]). Thus, if the field represents a currency value, then the indices may only show numbers when the slider is ready for manipulation. Manipulation of the slider will only cause number values to be selected. On the other hand, if the field represents a textual description, then the indices may only show alphanumeric characters when the slider is manipulated. (Ludtke at ¶ [0030]).

In Ludtke, a pointer 12 may be moved between the ends 30, 31 of the slider 14 in order to select a position along slider 14. (Ludtke at ¶ [0033]). The position of the pointer 12 represents a value amongst the data values represented by the slider 14. (Ludtke at ¶ [0033], [0036]). If the user drags pointer 12, the program selects candidate values from range 72 based on the then-current distance of the pointer from the ends 30, 31 of the bar.

In contrast with claim 1, Ludtke does not disclose or suggest “a touch-sensitive surface comprising the shape of an arc, **the arc divided into a first region and a second region by a dividing boundary.**” Rather, in Ludtke, the slider 14 represents a *continuous* region between ends 30 and 31. All data values represented by the position of the pointer 12 along the length of the slider 14 correspond to the *same* field of data. The slider 14 of Ludtke is simply not “divided into a first region and a second region by a dividing boundary.”

Ludtke also does not teach or suggest “**the first region associated with a first function . . . and the second region associated with a second function . . . the second function being an opposite function of the first function.**” Rather, in Ludtke, the data values represented by the slider 14 all correspond to a *single* field of data being manipulated. In Ludtke, there is no “first region” and “second region” as recited in the claim. Furthermore, the slider 14 represents *data values* and *not “function[s]”* as recited in the claims. Accordingly, in Ludtke, there is no “first region associated with a first function” and no “second region associated with a second function.” Moreover, because Ludtke does not disclose “a first region associated with a first function” and a “second region associated with a second function,” Ludtke cannot possibly disclose that the “**the second function [is] an opposite function of the first function.**” To the contrary, all of the data values represented by slider 14 belong to a single set of data values that represent the *same* data item.

Ludtke also does not disclose:

**the first region associated with a first function having a plurality of different degrees of said first function, each degree of the first function associated with a corresponding relative distance within the first region from the dividing boundary, and the second region associated with a second function having a plurality of different degrees of said second function, each degree of the second function associated with a corresponding relative distance within the second region from the dividing boundary,**

wherein the touchpad control is configured . . . to select the first function and **an associated degree of the first function corresponding to the relative distance of the touch from the dividing boundary** upon detecting the touch in the first region, and to select the second function and **an associated degree of the second function corresponding to the relative distance of the touch from the dividing boundary** upon detecting the touch in the second region.

As noted, in Ludtke, there is no “first region” and “second region” and there is no “associated” “first function” and “second function.” Moreover, in Ludtke, the relative data values are calculated so that the position of the value within the range 72 of potential values is proportional to the distance of the slider pointer 12 **from the ends** 30, 31 of the bar, (Ludtke at ¶ [0033]) and not the “relative distance” “**from a dividing boundary**” that divides the slider “into a first region and a second region.”

Therefore, because neither Zadesky nor Ludtke disclose or suggest the above emphasized claim language, Zadesky and Ludtke cannot possibly be combined to form the recited combination. Accordingly, claim 1 is not rendered obvious in view of the references. For similar reasons, the remaining independent claims and all dependent claims are not rendered obvious by Zadesky and Ludtke. Reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 is respectfully requested.

***Rejection Under 35 U.S.C. § 101***

Claims 25 and 38-41 stand rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. In particular, the Office objects that the phrase “at least one signal” is “intended to cover a signal as described in the specification.” The Office concludes that “[c]laiming a signal per se is considered non-statutory subject matter because a signal is a form of energy.” Reconsideration is respectfully requested.

Claim 25 is dependent on claim 24 which recites a “***method for interacting with a user interface control including a touchpad control comprising a touch-sensitive surface.***” Thus, claim 25 claims a “***method***” and not “a signal.” Methods are undeniably patentable subject matter. The claim merely recites a “signal” in connection with describing method steps. Applicants respectfully submit that there is no prohibition on reciting the term “signal” in connection with describing a claimed method.

Claim 38 recites a “***computing device having a user interface control including a touchpad control.***” Thus, claim 38 and dependent claims 39-41 are directed to a “computing device” and not “a signal.” A device is undeniably patentable subject matter. The claims merely recite a “signal” in connection with describing the operation of the claimed

**DOCKET NO.:** MSFT-2872/306077.02  
**Application No.:** 10/788,813  
**Office Action Dated:** August 20, 2008

**PATENT**

“computing device.” Applicants respectfully submit that there is no prohibition on reciting the term “signal” in connection with describing a claimed “computing device.”

Reconsideration and withdrawal of the rejection under 35 U.S.C. § 101 is respectfully requested.

**DOCKET NO.:** MSFT-2872/306077.02  
**Application No.:** 10/788,813  
**Office Action Dated:** August 20, 2008

**PATENT**

## **CONCLUSION**

Applicants respectfully submit that the pending claims are allowable and the application in condition for allowance. A Notice of Allowance is respectfully solicited.

Examiner Kumar is invited to call the undersigned in the event a telephone interview will advance prosecution of this application.

Date: December 19, 2008

/John E. McGlynn/  
John E. McGlynn  
Registration No. 42,863

Woodcock Washburn LLP  
Cira Centre  
2929 Arch Street, 12th Floor  
Philadelphia, PA 19104-2891  
Telephone: (215) 568-3100  
Facsimile: (215) 568-3439